

# SPORTS

## SWIMMING

Last Sunday's 3rd national synchronized swimming championship in the swimming pool of the Moscow Olimpiyskiy Sports Complex was first to be held under the auspices of a recently constituted federation embracing 2,000 performers from 27 Soviet cities.

17 participants from seven Union republics competed for the awards, with USSR state coach Igor Bugayev. Even though the scores went to already famous Moscow competitors, 19-year-old Yelena Osipova who won the overall title and her partner Irina Polynikina who snatched two titles for the pair and group composition, they had a rather tough time from younger competitors.

The performances last Sunday offered trainers the basis for the selection of a national team for the first yet European junior championship due on August 16-19 at the Hague, Holland.

Yelena Dolzhenko, 17, who won the bronze in the individual programme, has been practicing the sport for only five years. Her childhood goal is to make the European final. Her teammates in the national junior team Irina Zinkova and Olga Belova who did well in the dual event, are also in a fighting mood.

It is believed that the young skills of the girls offer good hopes for the USSR to present a fairly strong team for the 1986 European championship in Sofia and the 1986 Madrid world championship.

Valeriya NIRONOVA



National champions Irina Polynikina and Yelena Osipova in action. Photo by Andriy Kryazev

## 26th MEDAL FOR SERGEI KOPYLOV

At the just ended national championships on the Kiyevsky Olympic cycling track in Moscow, 24-year-old Sergei Kopylov of Leningrad won two gold medals and is now considered to be one of the main favourites in the "freestyle" tournament scheduled for Moscow in late August.

In our previous issue we carried a report on triple world champion Sergei Kopylov's 1,000 m time trial wins. Last Sunday he won his favourite sport event where he twice won

the world title in an event closely contested with Alexander Panfilov of Sverdlovsk. 1980 Games time trials silver medalist, in the past year of two Panfilov has followed Kopylov's system of combining time trials with sprint, which has bore fruit with performance considerably. Finishing third in the race was junior ex-world champion, 19-year-old Nikolai Kovtchik of Moscow.

For Kopylov his latest win brought up to 26 the number of his gold awards.



Reigning national champion Moscow Slava were thrashed 3-0 by Kuznetsov in a recent national rugby championship in Moscow. Photo by Sergei Proskov

## YURI TITOV ELECTED PRESIDENT

Yuri Titov, 48, of the USSR, was elected president of the International Gymnastic Federation for a third term at the authoritative organization's recent Congress. He has first elected to this office in 1976.

A Merited Master of Sport, he was overall world champion in 1963. He also won the Olympic team title in 1968.

Our editorial office, which organizes annual International "Moscow News" gymnastics competitions is in constant touch with Yuri Titov.

As our long-time friend we wish him good health and success in his work as President of IGF.

## THE SCORE IS 7-7 SO FAR...

Wimbledon champion American John McEnroe and live times Wimbledon winner Swede Bjorn Borg who left competitive sports two years ago will hold an exhibition match in Kansas City, Missouri, this September, according to an Associated Press report.

The idea belongs to McEnroe who still has no edge over his rival, the score of their matches being 7-7 so far. McEnroe won when they met in the US open championships in 1981.

## Games without champions

From July 26 to August 12, Los Angeles will be the scene for the 23rd Olympics but conspicuously absent from the Games are sportsmen from the USSR and most socialist nations.

One of the most attractive aspects of sports is keen competition out of which the ablest emerges in a hard-fought and honest contest. From this standpoint the present Games cannot, regrettably, provide a true idea of the balance of power in most Olympic sports. According to the Bratislava "Pravda" newspaper, 56 per cent of the world champions in various sporting activities will be missing from the Los Angeles Games. None are attending such events as weightlifting, modern pentathlon, basketball, and handball. The percentage of champions in boxing, and Greco-Roman and freestyle wrestling that will be absent from the Games is 75. Even in athletics the figure stands at over 51 per cent.

The Games' Organizing Committee and the US administration, especially, have done all they could to keep the USSR away from Los Angeles. Anti-Soviet campaigns, threats of physical violence and libelous statements were matched by discriminatory demands breaching the Olympic Charter, forcing Soviet sportsmen to decline participation in these all-important Games.

But what purpose did the anti-Soviet hysteria serve? Interdicted in the Games has declined, instantly affecting the ticket sales, and technical performance has lost its stimulus. In fact, the organizers were interested in other things, which surfaced most graphically on the opening

day - an undisputed propaganda of the "American way of life" and a continuation of the presidential campaign.

Soviet people are deeply convinced that the difficulties the Olympic movement has had to go through are only temporary and that the forces advocating the policy of the Olympic movement, and compliance with the Olympic Charter and making the Games a holiday of youth and sport would ultimately triumph.

## Libya stays out

Only several hours before the Los Angeles Games took off Libya announced its decision to attend in protest over discriminatory measures by the US State Department against Libya.

A Department spokesman in Washington said that three Libyans were refused visas for security reasons. The spokesman said that they had been barred from the Games only when they refused to board a plane to Los Angeles.

The president of the Olympic Committee of the USSR, Leonid Brezhnev, stated that it was not his responsibility to make sure whether they were a government or not. He said that the Committee, being a voluntary organization, had to do its duty and that the Games would take no notice of it.

## Brazil refuses to compete

Brazil will not take part in the Los Angeles Games because of the boycott.

According to the Brazilian Olympic authorities, an unknown person stole his way into the stadium and slashed a hole in the Brazilian flag. The Brazilian Olympic Committee has decided to boycott the Games.

Police and the Olympic Committee members responsible for security in Santa Anita prison where the Olympic drawing contest is being held, claim that the hole was made by a prisoner. One of the officers even went so far as to claim that the hole had cut the flag.

It seems there are too many incidents taking place at the Los Angeles Olympics.

## MONGOLIAN PEOPLE'S REPUBLIC

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MN INFORMATION No. 51

## Soviet-American mutual understanding is vital

Between July 30-August 2, 1981, Moscow Friendship House on the site of the second meeting of public representatives of the USSR and USA. Problems in Soviet-American relations and "dialogue" jointly conducted by the USSR-USA Society, the USA and Canadian Academy of Sciences, and the Institute for Policy Studies of Washington, were among the topics debated upon at the meeting.

A joint statement issued at the end of the meeting says, among other things, that the plenary meetings and working group sessions conducted in the past, the situation in Europe and the Third World, as well as Soviet and American attitudes to general security and disarmament.

Exchange of opinions, the elaboration of common positions, was considered useful and constructive by either side. The representatives emphasized that the current stage of tensions in bilateral relations special attention should be paid to contacts and serious dialogue in order to build up mutual understanding among the citizens of both nations.

Both sides agreed on the need for a programme capable of ending mutual suspicion, including initial steps towards general disarmament, and mutually verifiable control of moratorium on production, testing and deployment of all types of nuclear weapons.

The conference favoured continued dialogue directed on halting the arms race and improvement in bilateral relations.

## UNIDO conference opened

Vietnam. Numerous state flags flying to the facade of the Phung Palace, where over nine hundred and thirty countries are taking part in the 4th General Conference of UNIDO (United Nations Industrial Development Organization). The Soviet delegation is led by Mr. Kruglov, Chairman of the USSR State Committee for Science and Technology.

Addressing the delegates in an opening address, the UN Secretary-General Javier Perez de Cuellar stressed the importance of UNIDO as a universal body called upon to promote industrialization process of developing countries and to serve the purposes of wider cooperation on global, regional and national levels. The UN Secretary-General noted that UNIDO can play a major role in the

conditions of peace and international security. He pointed out that the international organization must contribute as far as it can to a lasting peace.

Making states on force, acceleration of the arms race and exacerbation of economic relations to policies of aggression stand in the way of resolving the key problems of world economic development.

The imperialist powers, the USA in the first place, use all sorts of political and economic pressure to force young states into crises, while continuing to step up its exploitation, create conditions which would allow their economies to be penetrated by foreign capital and transnational corporations, thus impeding the economic development of these countries.

## INTERNATIONAL GEOLOGICAL CONGRESS



Some 5,500 scientists and specialists from over 90 countries have gathered in the Soviet capital for the 27th International Geological Congress to deliberate on over a hundred geological problems. Participants will hear 2,500 reports, hold 46 symposia and six colloquia. "Geology of the Soviet Union", "Problems of the Arctic", "The World Ocean", "Mineral Resources" are among the topics to be discussed.

Also participating in the Congress are the International Union of Geological Sciences, the International Geological Correlation Programme, and over 90 UNESCO and UNEP bodies and other international organizations. 500 leading scientists from all over the world helped prepare the programme of the Congress.



These women participate in a demonstration in Bonn, the capital of the FRG, to protest against the continuing arms race and the deployment of new US nuclear first-strike missiles in Western Europe.

## 'PEACE AUTUMN' IN WEST GERMANY

Bonn. "Peace Autumn-84" is the programme of action, approved by the coordination committee of the West German peace movement, which will include nationwide protest marches against the deployment of Pershing-2 missiles. The deployment in West Germany of new American nuclear first-strike weapons, the committee appeals to all, has aggravated world tensions, and West German security has diminished rather than otherwise.

Meanwhile the conservative alliance of Christian Democratic and Christian Social Union is mounting a slanderous campaign against West German peace advocates, to a point where Minister of the Interior Friedrich Zimmermann of the CDU prepared a draft law giving wider powers to the police in breaking up peace demonstrations and arresting their members. The police has repeatedly used force against residents of a peace camp near the American military base at Muelheim where the first batteries of Pershing-2 missiles have already been installed. Despite this vicious campaign, activities of the anti-missile movement are resolved to carry on their drive.

## Politbureau weekly meeting

The Politbureau of the CPSU Central Committee has discussed further improvement of public transportation in the country. It mapped out measures to ensure the smooth operation of all types of transportation, to build up the production and technical base of transport organizations and accelerate introduction of automated control systems for ticket sales and traffic. Special attention was focused on staffing in transportation network and on improving the working and living conditions of drivers, train attendants, controllers and other transportation workers.

The Politbureau also approved of measures suggested by the USSR Council of Ministers for developing automated design systems and their application in the national economy.

The meeting approved of a decision of the CPSU Central Committee and the USSR Council of Ministers on measures to ensure the commissioning of the Yamburg gas condensate field in the Tyumen Region.

Similarly the Politbureau approved of the outcome of the meeting between Mikhail Gorbachev and Boris Ponomarev on the one hand, and Chairman of the German Communist Party

(Continued on page 2)

## PRESS TIME FOR COSMONAUTS

The Balkonur space centre sends off crews into space and welcomes them on their return. Now, the southern sun, too, is warmly greeting Vladimir Dzhanibekov, Svetlana Savitskaya and Igor Volk who are now back from space after a spell aboard the Salyut-7 space station.

The cosmonauts are currently undergoing medical checkup, writing up reports on their scientific experiments and, together with specialists assessing the performance of the space devices and experimental equipment.

Together with his comrades, Igor Volk planted a smooth-leaved elm - the traditional tree to commemorate his first space mission. There is a big shady grove planted by cosmonauts after their space flights and Igor is the 58th. It trees were planted by foreign spacemen who flew aboard Soyuz spacecraft.

Pressmen, too, are eager to associate with the cosmonauts. They have seized every opportunity to question them on their impressions and results. In his capacity as flight commander Vladimir Dzhanibekov summarized the programme. He said it chiefly contained new experiments, was interesting and had much practical value. Svetlana Savitskaya, the first space female welder, talked about experiments conducted with advanced technological equipment in outer space. She said the various tools performed wonderfully just as had been expected by their developers. It was fascinating to perform all those operations in weightlessness, she added. Though a fairly reserved person, Svetlana could not help making remarks about the beauty of our planet and the importance of relying people the world over, including cosmonauts, to preserve it forever.

Igor Volk who was in charge of scientific research, said that the mission provided new and important data on space medicine, biology and technology. Meanwhile, Leonid Kladov, Vladimir Soloviyov and Oleg Alkov have resumed their "rounds" aboard the Salyut-7 orbiting station. Though they have been in space for six months, medical specialists said that their working ability and cheerful disposition have not been affected in any way. They are conducting a new series of astrophysical research and have also started a biological experiment with equipment placed on the exterior of the spaceship.



Moskva River viewed from the Boroditsky Bridge. Photo by Andriy Kryazev

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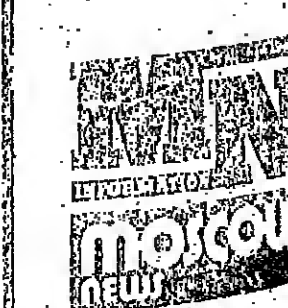
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### Round the Soviet Union

● A POWERFUL ORE-CARRYING SHIP NAMED AFTER NIKOLAI KUZNETSOV — A LEGENDARY WORLD WAR II HERO, HAS BEEN LAUNCHED AT THE "OKEAN" SHIPYARDS IN NIKOLAYEV. The 50,000-ton "Nikolai Kuznetsov" is the fourth ship in the new series.

● STUDENTS AND PROFESSORS OF THE KHARKOVSK INSTITUTE OF CULTURE RETURNED FROM THEIR EXPEDITION WITH RECORDINGS OF LOCAL FOLKLORE OF THE SOVIET FAR EAST. They studied the ethnic Olch and Nivkh culture, including the Olch Giva ensemble that performs folk melodies on a one-string birch-bark violin called sirpika. It was rebuilt by the ensemble's leader Iven Rongubu on the basis of stories told by the elderly. It has been entered into the old people's stories. The expedition material will be used for tutorials at the institute.

### Bioenergetics for agriculture

Production of the fuel gas, methane, has begun at a bioenergetic plant in the Latvian "Ogre" dairy farm. So far the plant is the first in the country to build such a plant.

The plant produces 280 cubic metres of methane daily. It can be used for preparing food, for heating, it can also be used in internal combustion engines. In addition to methane it produces carbon dioxide for boosting up growth and productivity of horticulture plants.

Besides, there are several bioenergetic by-products, such as methane-forming bacteria that are rich in proteins and vitamins. Finally, organic by-products turn out to be excellent fertilizer and manure, rich in nitrogen and phosphorus. Utilization of manure resolves the environmental protection problem of the farms.

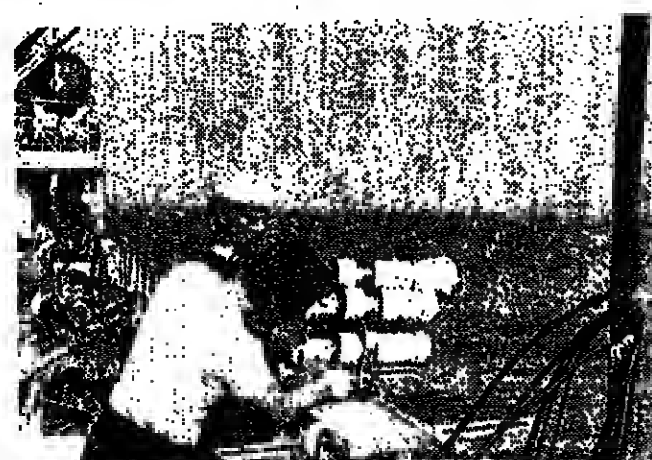
There is a blueprint for a more powerful installation for production of a 2,400 cubic metres of fuel gas daily.

### FROM THE SOVIET PRESS

#### MAGNETOHYDRODYNAMICS FOR POWER OF TOMORROW

At the present time a great part of the world's energy is generated by thermal plants burning organic fuels, writes the magazine SCIENCE IN USSR. At the same time, the efficiency even of the most advanced thermal power stations does not go beyond 40 per cent. The rest of the energy, almost two-thirds of it, is let out into the environment as heat. In this way, fuel resources are not only being depleted but the atmosphere also becomes polluted. According to the magazine, increasing the efficiency of power plants by only one per cent would save three million tonnes of fuel annually, hence the interest researchers take in looking for new energy sources. One promising way is direct conversion of heat into electricity using the magnetohydrodynamic principle (MHD). Soviet engineers have been involved in MHD energy production since the 1950s. The world's first pilot installation, the U-25, with an MHD generator is now in operation, and construction of the world's first commercial MHD power unit for the Ryzan thermal power station (500 megawatts) has begun. Such stations will save 20-25 per cent of fuel, as against the conventional types, writes the magazine. The construction of the first power unit will be completed in the second half of the 1980s, after which similar power units of 1,000 megawatts will be put into operation, making rational use of the tremendous coal deposits in the country. Soviet power engineers also plan to build coal-fired MHD plants. According to the magazine, the first of such projects using Kuznetsk and Kansk-Achinsk coal would probably go into operation in the early 1990s.

## WATCHFUL EYE FOR THE SEA



The laser installation you see here is on board the "Sveinorm" ship used in evaluating the thickness of oil slicks. The "Sveinorm" is a multi-purpose floating complex for

lete in approaching the place of shipwreck, it will attempt to collect the oil slicks on the surface sweeping oil into its storage tanks with special devices. The ship does not wait till a tanker produces a leakage in the sea. It is used to clean the tanks of all ships coming to the port of Mytchevsk near Odessa.

Practically all major ports in the Soviet Union are equipped with the necessary facilities for fighting oil pollution and the cleaning of oil tanks.

All Soviet ships are provided with separators for cleaning their liquid wastes. Special floating garbage collectors are used for collecting polluted water and garbage to the shores. A special fleet of small ships has been set up to service ocean-going vessels which are built by electric engineering plant in Minsk, in Central Asia.

Each installation discharges the metres of water in a short time within one hour. The efficiency is three times as great as that of the previous installations. One installation is used by only one person.

The new installation is an extensive application to existing in and zones. They also be included in the supply system of Kazakh and steel plants.

The new installation is an extensive application to existing in and zones. They also be included in the supply system of Kazakh and steel plants.

It was not easy to take gas to high. The pipelines were extended across valleys, woods and cliffs.

In the course of the past 25 years gas supplies in Georgia have developed into a powerful industry that constitutes 46 per cent of available fuel. New trunk gas pipelines are being built. With their completion gas will be led into houses, industrial enterprises and farms, and the air along the Black Sea coast of the Caucasus will become even purer.

through drilled examples of vices and virtues. Education by art becomes possible only when hearts are emotionally moved and won over.

We need truthfulness. Reality of conflict, plot and the heroics. Truthfulness of a film maker's tone. A vision, yes, candidly, heartily. So that the viewer should look back at himself from the screen, experience all that he views as something that belongs to him, something that is dear to him and burning. Even when the film's plot is separated from him, possibly by ages.

SECRETS OF FOLK MEDICINE Folk medicine makes extensive use of the properties of plants. But which plants are widely used in various parts of the world? The answer has been provided through research conducted by Soviet scientists. The long selected about one thousand varieties of flora in the Soviet Far East, they processed on computer information on their use in various countries, writes the NATURE magazine.

It turned out to be that plants possessing tonic, blood-enriching and other properties are widely used in the folk medicine. American Indians prefer plants with astringent and purgative properties while those of folk medicine in Siberia and West European peoples would rather use wound-healing plants. Geographic proximity does not always account for similarity in plant healing methods. In this sense faraway Tibet has turned out to be much closer to the European part of the USSR than neighbouring Western Europe.

Computer has provided the botanists and doctors with one type of useful information too, confirms the magazine. They have established that various peoples prefer to treat with herbal medicines. Experiences accumulated over the thousands of years of other peoples can now be used by Soviet scientists to enrich Soviet pharmacies with new efficient natural drugs.

Educating the viewer? Yes. Suggesting to him the real social and moral notions? Of course. But not

## Giant tanker

A new tanker the "Mikhailov", having November as a home port, has left for a maiden voyage. This gas tanker is 242.8-metre long, 32.2-metre wide, its capacity is 68,000 tonnes at a speed of 15 knots. It has been built at the Kuch shipyards.

Despite its imposing size, it is very manoeuvrable to easily pass through narrow canals. It is environmentally safe.

## A water conveyor

The litter and salt water of the Aral Sea can be made drinkable by the distillation installations which are built by electric engineering plant in Minsk, in Central Asia.

Each installation discharges the metres of water in a short time within one hour. The efficiency is three times as great as that of the previous installations. One installation is used by only one person.

The new installation is an extensive application to existing in and zones. They also be included in the supply system of Kazakh and steel plants.

## The rival of tufa

This is travertine. Big deposits of this limestone have been found in Armenia, in Transcaucasia. Travertine has been used as the republic's basic building material.

Travertine looks like marble. It is mined without difficulty and is easy to process. An industrial plant has already been put in operation which will annually produce 200,000 sq metres of travertine. First consignments have been shipped to Moscow.

## Soviet and Indian youth in the drive for peace

Indian youth think more of Soviet peace initiatives, and activities directed towards the prevention of a thermonuclear war and support the idea of holding the 12th World Festival of Youth and Students in Moscow in 1985, according to a communiqué issued after a visit to the USSR by an Indian youth delegation made up of representatives of ten leading youth and student organizations.

The delegation attended the Soviet-Indian seminar on "The contribution of Soviet and Indian youth to the strengthening and development of Soviet-Indian friendship and cooperation, the drive for peace and against the threat of nuclear war".

In an interview with the press D. Raja, vice-president of the All-India Youth Federation, said that the delegation was very impressed by preparations made for the 12th World Festival of Youth and Students. He said the delegation made a humble contribution to this course by picking up a statement. He said the Indian National Preparatory Committee was setting up committees in various states to prepare for the forthcoming festival.

Contributing to the interview S. Chandra, president of the National Students Union of India, said that he was glad that the seminar was fruitful and that they could discuss vital problems in detail.

After hatching in sweet-water basins, the fry of various ages swim down to the ocean. Calico and lampbrush move at the age of one, while other varieties stay in sweet water for as long as three years. The instinct of coming back to the native reservoir is conditioned by the location of local schools and the choice of ocean areas for fattening. Hence the particular importance of information about each school's habitat and migratory routes. Tagging helps to solve the problem.

This type of operation, being undertaken in conjunction with

These animals are not very well known and the attitude to them is biased, despite the fact that throughout their history they have done nothing wrong; on the contrary, bats have proved to be indispensably useful in destroying masses of insects. However, bats have been persecuted and their homes have been steadily destroyed. Out of 10 varieties of bats that have lived in the republic half have been included in the Red Data Book of disappearing flora and fauna. In some of the regions of Uzbekistan and Turkmenia the traditional shelters for roosting of the bats have been totally destroyed.

In the new natural reserve research will be conducted to determine the role of these animals in the biocenosis of the green natural region since there are no turtles in nature.

Researchers will also try to find out where bats live in summer. Sometimes they travel far from their winter homes. In order to determine how they prefer to be housed, bats are being captured. So far it has only been bats return steadily to habitations.

## A RETRO RALLY

An unusual motorcade is currently moving along Soviet roads in the Paris-Moscow-Paris rally sponsored by the Dutch club Traction-Avant. The event involves 121 old Citroens built between 1935 and 1957.

One of the club's activists Will de Heek told the press at the intermediary finish in Moscow that fifty years ago, a French driver Francois Leclerc drove from Paris to Moscow and back in a newly built Citroen model and so owners of old Citroens decided to mark 50 years of Leclerc's travel.

He said that the initial idea was to involve four cars in the rally but more French, West Ger-



Will de Heek (left) and friends interrupted their repairs for this memorable photo. Photo by Alexei Pyrdorov

man, British, Swiss and Italian motorists from other countries as well; altogether the rally involves 350 volunteers, many of them taking along their wives and children.

Will de Heek stated that they were all very happy about the journey and the hospitality of the Soviet people. Despite the fact that the route is rather long for the old cars, they all reached Moscow safely.

### Science and technology

#### SOVIET AND U.S. ICHTHYOLOGISTS COOPERATE

Soviet and American scientists are carrying out joint research in the north-western Pacific under an international programme. The purpose is to preserve Pacific salmon and work out a scientifically based catch policy. Scientists use a special purse seine to preserve the vitality of the study of the specimens. They are next placed into a special reservoir with sea water, measured, and tagged.

After hatching in sweet-water basins, the fry of various ages swim down to the ocean. Calico and lampbrush move at the age of one, while other varieties stay in sweet water for as long as three years. The instinct of coming back to the native reservoir is conditioned by the location of local schools and the choice of ocean areas for fattening. Hence the particular importance of information about each school's habitat and migratory routes. Tagging helps to solve the problem.

This type of operation, being undertaken in conjunction with

Japanese and Canadian researchers, is growing in scale. Data on the caught tagged fish go to the Pacific Institute of Fisheries and Oceanography in Vladivostok, USSR, as well to the other three countries.

#### SCIENTISTS DISCOVER HOW MUMIYO IS FORMED

Soviet scientists continue to explore the properties of mummy (from Persian "mum" for wax), an extremely rare natural balsam. Recently scientists in Kirghizia, a republic in Soviet Central Asia, have found out how mummy is formed. Work is now under way to obtain the substance in laboratory conditions.

After many years of research it has been established that mummy is a powerful biostimulator which intensifies the biological functions of a living organism.

We have come to the conclusion, says Arelaubek Alimzhev, Corresponding Member of the Kirghiz Academy of Sciences, that mummy is an organic matter, a product of herbivorous animals' metabolism. Rarified air, sharp temperature rises and falls, intensive solar radiation and low humidity of soil con-

siderably lower the activity of microorganisms which lead to the breakdown of organic remains. In time the biomass becomes mummified and polymerized and increases its physiological activity. We have discovered the animal that takes part in the "mummification" of the natural balsam. It is a rodent, the mountain silver vole. One such mouse (they can be bred in cages) produces up to 1.5 grammes of mummy a day.

To test the validity of our conclusions we carried out a laboratory experiment. Plants that grow in areas where mummy has been found, were included in the vole's diet. We finally succeeded in obtaining a dark glistening substance which on analysis was found to possess the same properties and pharmacological effects as natural mummy.

Medical experts have established that the Academics added, that for treatment of one open infected wound of the lower leg 7.5 g of mummy are needed. This means that a single mountain vole can produce enough mummy to cure hundreds of patients.

Of course, the scientists said in conclusion, our explanation of the origins of mummy is much more prosaic than the numerous legends that have surrounded the issue up to now. But it is scientifically grounded.

### VIEWPOINT

## NEW DEVELOPMENTS FOR RAILWAYS

Alexei DAROV

● "Project of the century" — the Sakhalin Main (SAA) Railway whose basic track is 3,500 km long will be completed one year before the schedule and will be opened for traffic by November 7, 1984.

● The Moscow-Leningrad railway (550 km) is the world's only instance of successful running three pairs of passenger expresses (100-200 km/h) along with a heavy cargo traffic.

● The Soviet railwaymen have been the first in the world to drive a cargo supertrain weighing over 30 thousand tonnes.

The above reports from the Soviet press show the new things that have appeared in the Soviet railway transport.

Special attention to the development of this transport is a tradition with this country. Given the total length of 13 thousand kilometres amounting for only 11 per cent of the world's railways, it handles 53 per cent of the world cargo and 25 per cent of the passenger transportation in the world. The USSR leads the world in the level of electrification of its railway network as well. Cargo cars' productivity, its average daily run over the Soviet railways is almost three times as high as in the USA and 4 to 6 times higher than in a number of European countries. But this is still insufficient in the present-day Soviet economy. Its accelerated and intensive development, particularly in the eastern regions of the country, provides the chief incentive for further improvement and development of the railway transport. Efficiency is another important factor in favour of this energy consumption for delivering cargoes by rail is 10 to 15 times lower than by automobile, and 100 to 120 times lower than by air for passenger carriages.

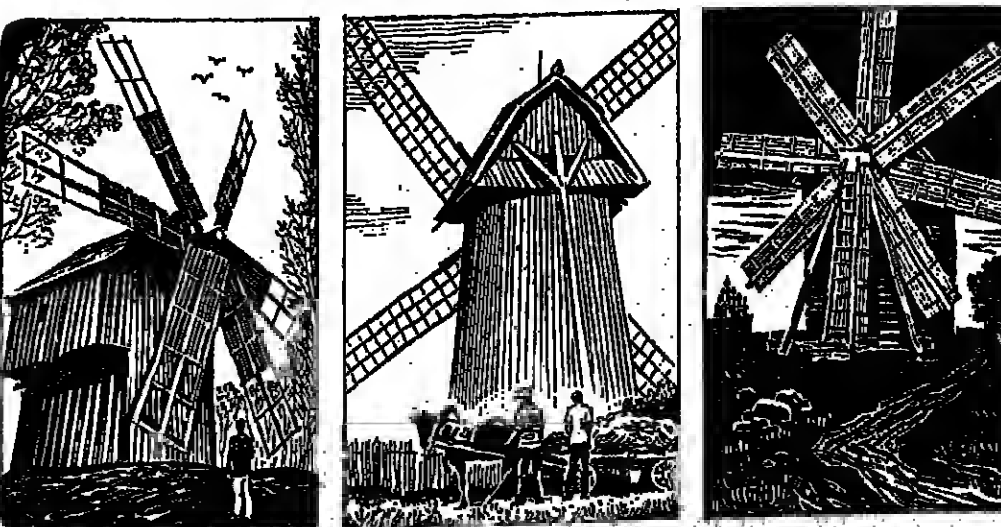
While in the 11th Five-Year Plan period (1981-85) the total capital investment growth into economy is 15 per cent, railways' figure is over 30 per cent. Basic directions in the development of railway transport are represented by improving baggage management, mechanization and automation, larger, greater weights and speeds, further electrification of the railways, introduction of more powerful locomotives.

New railways are also built, of course. For 1984 it is planned to put into operation over 300 km of new railways. Besides the major BAM project, Siberia builds the Surgut-Urengoi-Vogelovo line of 650 km and the Anzherkaya-Berzas main line. Several major railways are being built in the Transcaucasia, and in other regions of the country.

Almost 5.5 thousand kilometres of railways will be electrified in 1981-85. The percentage of electric traction will grow by the end of 1985 to 60 per cent from the present 52.6 per cent. About 13 thousand kilometres of railways will be equipped with automatic lock-out and centralized dispatcher services.

The most important factor in raising the labour productivity is found, however, in a greater average weight of each train. The prospects are that about 60 per cent of the baggage growth will be effected through increasing the train weight, the remaining 40 per cent to be achieved through more intensive traffic.

## OPEN-AIR MUSEUMS



Urbanization fast changes the environment, the look of cities and villages. The desire to preserve for posterity tokens of life of former generations has necessitated open-air museums of unique wooden architecture.

● A museum of folk architecture in Lvov, Anzherkaya-Berzas main line. Several major railways are being built in the Transcaucasia, and in other regions of the country.

● A 19th-century windmill in the Kirghiz architecture.



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